

48. (New) The ATM switch according to claim 42, wherein if the backlog falls below a particular level, the output controls are arranged to lift the rate limitation.

49. (New) The ATM switch according to claim 42, wherein the data buffers are physically associated with input ports.

50. (New) The ATM switch according to claim 42, wherein the data buffers are physically associated with output ports.

51. (New) The ATM switch according to claim 42, wherein the rate limitation is enforced at inputs.

52. (New) The ATM switch according to claim 42, wherein the rate limitation is enforced at outputs.

53. (New) The ATM switch according to claim 42, wherein each of the data units designates a priority and an input port and the determination of whether the additional data units which designate relatively low priorities and a particular input port are in violation of the rate limitation is based on a "leaky bucket" algorithm.

54. (New) The ATM switch according to claim 53, wherein the particular input port is associated with a selected store whose backlog caused the selective filtering condition to be imposed.

#### REMARKS

Claims 1-32 are currently pending in this application. New claims 33-54 have been added to claim additional subject matter to which applicant is entitled. In view of the following remarks, applicant respectfully submits that the application is in condition

for allowance. Applicant therefore, respectfully requests reexamination, reconsideration and allowance of the application.

The Examiner rejected claims 1-22 under 35 U.S.C. 102(e) as allegedly being anticipated by Ramamurthy et al (U.S. Pat. No. 6,046,901). Applicant respectfully traverses this rejection.

Claims 1 and 10 recite an ATM switch wherein each of a plurality of output ports are "operatively associated with a plurality of data stores and an output control". The cited reference does not disclose or suggest a switch having a plurality of output ports, wherein each of the output ports is operatively associated with a plurality of data stores. Rather, referring to FIG. 9 and col. 22 lines 42-52, Ramamurthy discloses an ATM switch having two input ports (910, 920) with traffic streams directed to certain output port(s). Each output port has a single 128 cell output buffer that serves the two input ports in a work-conserving, round-robin manner.

Therefore, applicant respectfully submits that claims 1 and 10 each recite a novel and unobvious apparatus in view of Ramamurthy and should therefore be allowed. Further claims 2-9 and claims 11-22, that depend on claims 1 and 10 respectively are allowable as are claims 1 and 10 and for the additional limitations recited therein.

The Examiner rejected claims 23-32 under 35 U.S.C. 103(a) as allegedly being unpatentable over Ramamurthy in view of Dighe et. al. (U.S. Patent 5,530,695). The Examiner admits that Ramamurthy does not disclose transmitting and monitoring "requests" to enforce a rate limitation. However, the Examiner alleges that Dighe teaches the use of "requests" to control rate and that it would have been obvious to one of skill in the art to combine the rate control method taught by Dighe with the switch of Ramamurthy. Applicant respectfully traverses this rejection.

Independent claim 23 recites (paraphrasing) data units buffered in data stores that are physically associated with the input ports and output controls that are physically associated with the output ports.

As recited in claim 23 the output controls monitor the backlog level of the data units via requests from an input controller that is also physically associated with the input port. Applicant respectfully submits that the cited references alone or in combination do not disclose or suggest the claimed limitations.

To the contrary, Ramamurthy simply monitors a buffer that is physically associated with an output port and enforces a rate limitation when the output buffer is full. Further, Dighe et al. discloses a traffic control framework for ATM networks wherein a burst mode terminal provides to a switch controller a RTS (request to send) message containing the peak rate, the sustained rate, and the compliant burst size of the burst data packet to be sent. The switch controller then determines whether the network can handle the data. If the network is able to handle the data, the burst data is connected to the network via ATM switch. (Dighe et al., FIG. 3, col. 3, lines 27-42).

Thus, Dighe regulates traffic on the ATM switch by monitoring the burst parameters associated with a burst packet in light of the existing traffic on that switch. The burst packet is admitted if the admission of the packet would not degrade the QoS of calls already in progress. Applicant therefore respectfully submits that neither Ramamurthy and Dighe, alone or in combination, disclose or suggest an ATM switch wherein an output controller is operatively associated with data stores that are physically associated with input ports and monitors the backlog of data units stored in the data stores through information transmitted in requests.

Accordingly, applicant respectfully submits that claim 23 recites a novel and unobvious apparatus in view of Ramamurthy and Dighe and should therefore be allowed. Further claims 24-32, that depend on claim 23 are allowable as is claim 23 and for the additional limitations recited therein.

Applicant has added new claims 33-54 to claim additional subject matter to which applicant is entitled. Applicant respectfully submits that the newly added claims should also be allowed. Independent claims 33 and 42 recite an ATM switch wherein "output controls are arranged to monitor the backlog of buffered data units in two or more of said plurality of data stores for delivery to their associated output ports and, if the backlog buffered in one or more selected stores reaches a particular level, to enforce a rate limitation ...". Applicant respectfully submits that neither Ramamurthy or Dighe, alone or in combination, disclose the recited limitation.

Rather, Ramamurthy simply monitors a single buffer that is physically associated with an output and enforces a rate limitation when the entire buffer is full. Further, Dighe enforces rate limitations in accordance with the burst parameters associated with a given packet and in no way monitors the backlog level of a data store.

Accordingly, applicant respectfully submits that claims 33 and 42 each recite a novel and unobvious apparatus in view of Ramamurthy and Dighe and should therefore be allowed. Further claims 34-41 and 43-54 that depend on claims 33 and 42 respectively are allowable as are claims 33 and 42 and for additional limitations recited therein.

Respectfully submitted,

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